

upheaval in New Guinea, especially as there has never been any similar evidence found on the east side of the Australian continent. It remains to be seen whether, in this case as in the Southern Australian tertiaries, we have the sign of volcanic activity accompanying the upheaval. Mr. Macleay showed me specimens of true amygdaloidal and vesicular dolerites, taken from the coast of Darnley Island, opposite Yule Island, a distance however of 150 miles. They were in all respects similar to the Victorian pliocene dolerites. The bathymetrical evidence of these fossils show that at least there has been upheaval to the extent of 400 or 500 feet.

Continuation of the Mollusca collected during the Chevert Expedition.

By J. BRAZIER, C.M.Z.S., Corr. Mem Roy. Soc., Tas.

SUB-CLASS PULMONATA.

ORDER INOPERCULATA.

FAMILY AURICULIDÆ.

1.—PYTHIA IMPERFORATA.

Scarabus imperforatus, A. Adams, Proc. Zool. Soc., London, 1850, p. 151.

Pythia imperforata, Pfr. Mon. Auriculaceorum, 1856, p. 81.

„ „ Paetel Catalog. 1873, p. 114.

„ „ Pfr. Mon. Pneum. Viven. 1876, p. 339.

Hab. Katow and Ethel River, New Guinea.

2.—PYTHIA INSULARIS.

Scarabus insularis, Hombr. et Jacq. Voy. au Pole Sud., 5, p. 40 Atlas Moll., pl. 10, fig. 15, 16, 17.

Pythia insularis, Pfr. Mon. Auriculaceorum, 1856, p. 85.

„ „ Pfr. Mon. Pneum. Viven. 1876, p. 341.

Hab. Katow River; Hall Sound, New Guinea.

3.—CASSIDULA ANGULIFERA.

- Auricula Angulifera*, Petit. Revue. Zool., 1841, p. 101.
 „ „ (Cassidula) Menke, Moll. Nov. Holland,
 p. 8.
 „ *subrepta*, Hombr. et Jacq. Voy au Pole, Sud. 5, p. 36,
 Atlas Moll., pl. 9, fig. 13, 14, 15.
 „ *angulata*, Forbes, Appendix to Voyage Rattlesnake,
 p. 362.
Cassidula angulifera, H. and A. Adams, Proc. Zool. Soc.,
 London, 1854, p. 31; *Rhodostoma bidentata*, Swainson, Proc.
 Royal Soc., Tasmania, 1854, Vol. 3, p. 45, pl. 7, fig. 5.
Cassidula angulifera, Pfr. Mon. Auriculaceorum, 1856, p. 119.
 „ „ Chenu Manuel de Conch., part 1, p. 475,
 fig. 3512. *Melampus anguliterus*, Chenu Lec. élém., p. 244, f. 913.
Cassidula angulifera, Paetel Catalog. 1873, p. 114.
 „ „ Pfr. Mon. Pneum. Viven. 1876, p. 354.
Hab. Katow, New Guinea, two specimens were found dead on
 the beach; Cape Sidmouth and Fitzroy Island, North-east
 Australia (Brazier); Cardwell, Rockingham Bay, (Mr. Beddome.)

4.—CASSIDULA AURIS-FELIS.

- Bulmus auris-felis*, Brug. Encycl. méth. 1, p. 343, p. 77.
Voluta coffea, Chem. (not Linn.) 9, pt. 2, 45, f. 1043, 1044.
Ellobium inflammatum, Bolt, Mus., p. 106, n. 1352.
Auricula coffea, Wood Ind. Test., p. 97, pl. 19, fig. 15.
 „ *auris-felis*, Blainville, Dict. Soc. nat. 3 Suppl., p. 132.
 „ *felis* (Cassidula), Fer. Prodr., p. 105, n. 25.
 „ „ Lam. Anim. Sans. Vert., tome 6, part 2, p. 138.
 Desh. Ed., Vol. 8, p. 326. Reeve, Conch. Syst., Vol. 2, pl. 187,
 f. 6.
Auricula fusca, Hombr. et Jacq. Voy. au Pol. Sud., Vol. 5, p. 34,
 Atlas Moll., pl. 9, f. 7, 8, 9.
Cassidulus felis, Beck, Ind., p. 105. no. 2.
Chemnitzii, Beck, Ind., p. 105, no. 1.
Cassidula felis, Anton. Verz., p. 48. Gray, Proc. Zool. Soc.,
 1847, p. 179.

Cassidula coffea, H. and A. Adams, Proc. Zool. Soc., 1854, p. 31.

„ *auris-felis*, Morelet, Sér., Conch. de Moll., p. 272.

Rhodostoma coffea, Swainson, Malacology, p. 344.

Cassidula auris-felis, Pfr. Mon. Auriculaceorum, 1856, p. 117,
Mon. Pneum. Viven, 1876, p. 354; Paetel Catalog. 1873, p. 114.

Hab. Mud Bay, Cape York, North Australia, found up a small creek, on the roots of *Rhizophora*; Singapore, Phillipine Islands, Cochin China, Borneo.

5.—CASSIDULA RUGULATA.

Auricula rugulata, Hombr. et. Jacq. Voy. au Pole Sud. Atlas, pl. 9, fig. 10, 11, 12.

Auricula regulata, Rouss. Voy. au Pole, Sud., Vol. 5, p. 35.

Hab. Ethel River, Hall Sound, New Guinea.

6.—CASSIDULA SOWERBYANA.

Auricula Sowerbyana (*Cassidula*), Pfr. Zeitschr., f. Malak, 1853, p. 125.

Cassidula Sowerbyana, H. and A. Adams, Proc. Zool. Soc. 1854, p. 32.

„ *decussata*, H. and A. Adams, Proc. Zool. Soc. 1854, p. 32.

„ *Sowerbyana*, Pfr. Mon. Auriculaceorum, 1856, p. 111.
Mon. Pneum. Viven, 1876, p. 352, Paetel Catalog, 1873, p. 114.

Hab. Hall Sound, New Guinea, found on *Rhizophora*; Singapore and Moreton Bay (Mus. Cuming.)

7.—AURICULA AURIS-JUDÆ.

Bulla auris Judæ, Linn. Syst., ed. 10, p. 728.

Voluta Auris Judæ, Linn. Syst, ed 12, p. 1187.

Helix Auris Judæ, Mull. Hist., Verm. 2, p. 109.

Bulimus Auris Judæ, Brug. Encycl., Meth 1, p. 344.

Ellobium labrosum, Bolt., Mus., p. 105, n. 1350.

„ *subtile*, Bolt., Mus., p. 105, n. 1351.

„ *auris Judæ*, H. and A. Adams, Proc. Zool. Soc., 1854, p. 7.

Auricula Judae, Lam. Anim. Sans. Vert., tome 6, part 2, p. 137.
Ed. Deshayes, tome 8, p. 324.

Auricula auris Judae, Pfr. Mon. Auriculaceorum, 1856, p. 134.

„ „ „ Paetel Catalog. 1873, p. 115.

Auriculus auris Judae, Pfr. Mon. Pneum. Viven. 1876, p. 357.

Hab. Creeks about Cape York, North Australia; Cape Sidmouth, North-East Australia (Brazier.)

8.—AURICULA DACTYLUS.

Auricula dactylus, Pfr., Proc. Zool. Soc., London, 1854, p. 151.

„ „ Pfr. Mon. Auriculaceorum, 1856, p. 129.

„ „ Pfr. Novit, Conch. 1, p. 15, n. 24, pl. 5,
f. 15, 16.

Auriculus dactylus, Pfr. Mon. Pneum. Viven, 1876, p. 357.

Hab. Ethel River, Hall Sound, New Guinea; Borneo (Pfeiffer.)

9.—AURICULA SEMISCUPTA.

Ellobium semisculptum, H. and A. Adams, Proc. Zool. Soc., 1854, p. 9.

Auricula semisculpta, Pfr. Mon. Auriculaceorum, 1856, p. 136.

„ „ Pfr. Novit, Conch. 1, p. 39, pl. 10, fig. 7-9.

„ „ Gassies, Faune, Conch., Nouv. Caléd., 1863,
p. 70, pl. 3, fig. 11.

Auriculus semisculptus, Pfr. Mon. Pneum. Viven, 1876, p. 359.

Hab. Mud Bay, Cape York, North Australia; Warrior Island, Torres Straits, found under samphire; Gambier Islands (Cuming); Isle of Pines, New Caledonia (Montrouzier); Prony Bay, New Caledonia (Brazier.)

10.—AURICULA DUNKERI.

Auricula Dunkeri, Pfr. Zeitschr., f. Malak., 1853, p. 125.

„ „ Pfr. Mon. Auriculaceorum, 1856, p. 138.

„ „ Pfr. Mon. Pneum. Viven. 1876, p. 360.

Hab. Katow, New Guinea.

11.—PLECOTREMA LIRATA.

Plecotrema lirata, H. and A. Adams, Proc. Zool. Soc., 1853,
p. 121.

Plecotrema lirata Pfr. Mon. Auriculaceorum, 1856, p. 101.

„ „ Pfr. Mon. Pneum. Viven, 1876, p. 343.

Hab. Long Island, Torres Straits, found under coral blocks, in company with *Quoyia decollata*.

12.—PLECOTREMA MONILIFERA.

Plecotrema monilifera, H. and A. Adams, Proc. Zool. Soc., 1853, p. 120.

„ „ Pfr. Mon. Auriculaceorum, 1856, p. 101.

„ „ Pfr. Mon. Pneum. Viven. 1876, p. 347.

Hab. Darnley Island, Torres Straits.

The locality of this fine species does not appear to have been known to the Brothers H. and A. Adams, or Dr. Pfeiffer. The beaded transverse ribs are conspicuous. One single example found.

13.—LAIMODONTA BRONNI.

Auricula Bronnii, Philippi Zeitschr. f. Malak, 1846, p. 98.

Melampus Bronni, Pfr. Mon. Auriculaceorum, 1856, p. 49.

Ophicardelus (Laimodonta) Sandwichiensis, H. and A. Adams, Proc. Zool. Soc., 1854, p. 34.

Melampus Sandwichiensis, Pfr. Mon. Auriculaceorum, 1856, p. 50.

„ *sandwicensis*, Paetel Catalog. 1873, p. 114.

„ *sandwichiensis*, Pfr. Mon. Pneum. Viven. 1876, p. 319.

„ *Bronni*, Pfr. „ „ „ „

Auricula Sandwichiensis, Soulet.

Hab. Home Islands, North-East Australia; Suë and Darnley Islands, Torres Straits; Sandwich Islands (Pease.)

The Australian specimens are smaller than the typical species from the Sandwich Islands.

SUB-FAMILY MELAMPEA.

14.—MELAMPUS ADAMSIANUS.

Melampus Adamsianus, Pfr. Proc. Zool. Soc., London, 1854, p. 121.

„ „ Pfr. Mon. Auriculaceorum, 1856, p. 49.

Melampus Adamsianus, Pfr. Novit, Conch 1, p. 18, pl. 5, fig. 17, 19.

” ” Gassies, Faune, Conch., Nouv. Caled., 1863, p. 570, pl. 7., fig. 2.

Melampus Adamsianus, Pfr. Mon. Pneum Viven, 1876, p. 304.

Hab. Mud Bay, Cape York, North Australia; Art Island, New Caledonia (R. P. Montrouzier); Prony Bay, New Caledonia (Brazier); New Zealand? (Cuming.)

I doubt if this species was ever found in New Zealand. Very few of the Shells described from the Cumingian Collection ever had the correct locality given to them.

15.—MELAMPUS PULCHELLUS.

Auricula pulchella, Petit. Proc. Zool. Soc., 1842, p. 202.

Melampus pulchellus (Tralia), H. and A. Adams, Proc. Zool. Soc., 1842, p. 11; *Melampus Pulchellus*, Pfr. Mon. Auriculaceorum, 1856, p. 35; Mon. Pneum. Viven. 1876, p. 308.

Hab. Warrior Island, Torres Straits; Fitzroy Island, North-East Australia (Brazier); Phillippines, Singapore.

16.—MELAMPUS CRISTATUS.

Melampus cristatus, Pfr. Proc. Zool. Soc., 1854, p. 122.

” ” Pfr. Mon. Auriculaceorum, 1856, p. 43.

” ” Pfr. Novit., Conch. 1, p. 17, pl. 5, fig. 3, 4, 5.

” ” Gassies, Faune, Conch. Nouv. Caled., 1863, p. 59, pl. 7, fig. 8; Pfr. Mon. Pneum. Viven. 1876, p. 313.

Hab. Home Islands, North-East Australia; Bay Boisée, New Caledonia (R. P. Montrouzier); Prony Bay, New Caledonia (Brazier); Phillippine Islands (Cuming.)

17.—MELAMPUS VARIABILIS.

Melampus variabilis, Gassies, Faune Conch. Nouv. Caled., 1863, p. 65, pl. 6, fig. 8.

Melampus variabilis, Pfr. Mon. Pneum. Viven. 1876, p. 315.

Hab. Barrow Island, Cape Grenville, North-East Australia; Mud Bay, Cape York, North Australia; New Caledonia (Raynal.) Anse Vata, Near Nouméa, New Caledonia (Brazier); very common.

18.—MELAMPUS, SP?

Hab. Warrior Island, Torres Straits. Two specimens were found, dead and worn.

19.—MELAMPUS STUTCHBURYI.

Melampus (Ophicardelus) Stutchburyi, Pfr. Proc. Zool. Soc., 1856, p. 393; Mon. Pneum. Viven. 1876, p. 321.

Melampus Stutchburyi, Paetel Catalog. 1873, p. 114.

Hab. Cape Grenville, North-East Australia; Port Curtis (Stutchbury.)

The shell figured by Gassies in his Faune Conchyliologique Nouvelle-Caledonie, 1863, does not represent *Melampus Stutchburyi*, Pfr. M. Gassies gives Pfeiffers description of that species, and figures some shell like *Melampus Australis*. The only shell anything like *M. Stutchburyi*, Pfr., is *Melampus Montrouzieri*, Souverbie, which I have collected at Prony Bay, in the South of New Caledonia.

20.—MELAMPUS SULCATUS.

Ophicardelus (Laimodonta) sulcata, H. and A. Adams, Proc. Zool. Soc., 1854, p. 34; *Melampus sulcatus*, Pfr. Mon. Auriculaceorum, 1856, p. 54; Paetel Catalog. 1873, p. 114; Pfr. Mon. Pneum. Viven. 1876, p. 323.

Ophicardelus (sulcatus), Angas. Proc. Zool. Soc., 1867, p. 231.

Hab. Cape York, North Australia, four specimens found; Port Jackson, New South Wales.

FAMILY SIPHONARIIDÆ.

21.—SIPHONARIA ATRA.

Siphonaria atra, Quoy and Gaimard, Voy. de l'Astrolabe, Vol. 2, p. 337, pl. 25, fig. 41, 42; Reeve, Conch., Icon., pl. 3, sp. 14; Paetel Catalog. 1873, p. 117.

Hab. Palm Island, North-East Australia; Darnley Island, Torres Straits; Port Jackson, New South Wales; Tutula, Samoan Group (Brazier.)

22.—SIPHONARIA SIPHO.

Siphonaria siphonaria, Sowerby, Genera of Shells, fig. 1, Siphonaria.

„ „ Lam. Anim. Sans, Vert (Desh. ed.), tome 7,
p. 557.

Hab. Darnley and Dungeness Islands, Torres Straits.

23.—SIPHONARIA SQUIJORENSIS.

Liphonaria Squijorensis, Reeve, Conch. Icon., 1856, pl. 6, sp. 27.

Hab. Bet Island, Torres Straits.

The *Batrachians* of the “Chevert” Expedition,

BY WILLIAM MACLEAY, F.L.S.

The *Batrachians* collected during the cruise of the “Chevert,” are few in point of number, and belong exclusively to the section of the *Batrachia Anura*, to which Dr. Gunther gives the name OPISTHOGLLOSSA. But though few, they are not without interest, as exhibiting the complete dissimilarity between the *Batrachian* Fauna of New Guinea and Australia.

OPISTHOGLLOSSA OXYDACTYLA.

RANASTER, New Genus.

Habit rather stout. Head large and rounded. Legs rather short. Fingers and toes tapering, and slightly webbed, with tubercular pads on the carpal and tarsal bones. Skin smooth. Maxillary teeth conspicuous, acute, bicuspid, and sub-distant. Vomerine teeth conspicuous and sub-distant, situated on a long, straight, transverse ridge, sharply divided in the middle. Inner nostrils rather large, and in front of the vomerine ridge. Tongue largely notched behind. Tympanum distinct. Sacral vertebra dilated. No paratoids.

This genus will, I fancy, fall into Gunther's Family *Discoglossidæ*. The most remarkable feature about it is the dentition; the teeth, both maxillary and vomerine, being comparatively large and distant.